
30 DAYS BEFORE
FLY EMERGENCE
30 DAYS AFTER
FIRST FROST
ClariFly
LARVICIDE
ALTOSID® IGR
FEED-THRU

THE FACTS

1 DAIRY COW WITH MORE THAN 500 HORN & STABLE FLIES

CAN RESULT IN UP TO

300 BLOOD MEALS & 20% DROP IN MILK PRODUCTION

THE DESTRUCTION OF MILK PRODUCING TISSUE LEADS TO BLIND QUARTERS IN THE UDDER, ONE FACTOR THAT REDUCES MILK YIELDS.

MILK YIELD ACCOUNTS FOR MORE THAN 60% OF THE VARIATION IN CALF WEANING WEIGHT

THE PEST

Fly infestations greatly impact production on dairy farms and beef cattle operations. Left unchecked, some fly populations can swell up to 4,000 flies per animal, which translates to a huge economic loss. Without a proactive fly management program in place, diseases and reductions in weight and milking productivity resulting from flies can take a significant toll on the comfort of animals and an operation's bottom line.

ClariFly® Larvicide and Altosid® IGR from Central Life Sciences provide producers with protection against the damaging impact of flies. The products do not have a direct effect on production, but provide control for the nuisance flies that do. Both product lines are mixed into cattle feed and passed through the cow's digestive system and into manure where they interrupt the life cycle of the fly, preventing development into the adult stage. The active ingredient in each line of products–Diflubenzuron in ClariFly® Larvicide and (S)-methoprene in Altosid® IGR–provides target-specific modes of action that are not harmful to birds, fish, reptiles, mammals or beneficial insects.

The first step in a comprehensive fly control program is understanding the flies most commonly found on a dairy or beef operation.

HOUSE FLY

House flies spread pathogens collected on their legs and mouth parts to the bodies and feed of cattle.

COST: House flies transmit more than 65 disease organisms, including mastitis-causing bacteria, that can interfere with cattle profitability.

FACE FLY

Feeds on the face of the animal - specifically the eye fluids – spreading diseases including pinkeye.

COST: The treatment of pinkeye and associated drop in weight and milk production cost U.S. producers $150 million per year.

HORN FLY

The most damaging pest on a beef cattle operation, taking up to 40 blood meals per day with painful bites leading to reduced weight gain and feed efficiency.

COST: With horn flies responsible for weight losses of as much as 50 lbs per animal, the cost can reach as high as $45* per head in a season.

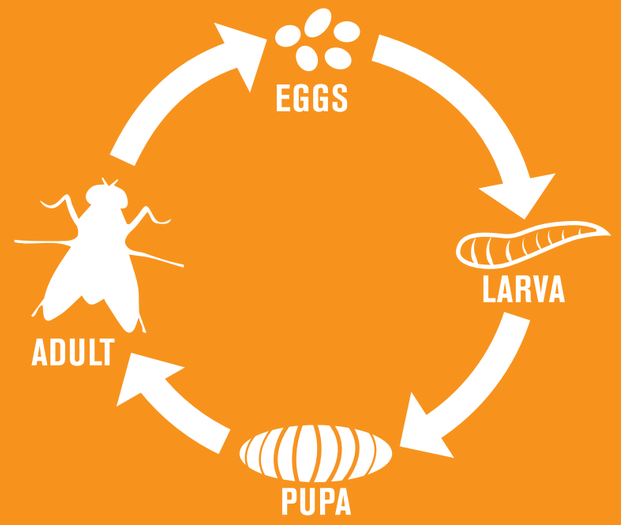
*assumes value of $0.90 per pound

STABLE FLY

Pesters animals with painful bites that cause excessive movement to dislodge the flies and impacts weight gain.

COST: The impact of stable flies is estimated to exceed $250 million annually.

THE LIFE CYCLE



EGG

Typically laid in manure or other rotting organic matter, these flies will lay eggs in batches that, in the case of the house fly, can reach as many as 150. The eggs typically hatch within one to three days.

LARVA

At this stage, the flies will feed in the egg-laying site, focusing on the surrounding matter. They will molt several times in this stage until they grow large enough to pupate.

PUPA

The pupal stage can be as brief as three days to as many as several weeks depending on the species. At this time, the flies are developing legs and wings before emerging as full-grown adults.

ADULT

The final stage of the life cycle finds the fly ready to feed and start the life cycle all over again.

THE SOLUTION

With the annual spring emergence of flies starting the pest's life cycle each year, limiting the number of overwintering pupae is an essential step in controlling fly populations before the season begins. However, precisely planning exactly when to target the overwintering pupae can be difficult given the unpredictability of seasonal weather patterns. For example, Madison, Wis. typically experiences the first frost of the season in the first week of October. However, the date has been recorded as early as September 12 and as late as November 12. It is also common for many regions of the country to experience several weeks of warm weather after the first recorded frost of the fall/winter season or before the final frost in spring. To account for the unpredictable nature of frost dates, Central Life Sciences recommends taking a "30/30" approach to fly control on dairy and beef operations.

To help determine the ideal timing, producers should begin feeding ClariFly® Larvicide and Altosid® IGR approximately 30 days before the average date that daily daytime temperatures typically reach 65° F. This is the point when overwintering flies emerge to mark the start of the fly season. Feeding rates are 0.10 mg per kg of body weight (hundred pounds of body weight) per day for ClariFly® Larvicide, and 1.13 mg per kg per day for Altosid® IGR, though users should always consult the product label for exact instructions. The process should be maintained into the fall season until 30 days after first frost has been recorded.

Countless studies have shown that flies can cause serious economic damage to both dairy and beef operations. The effects are very real to producers, and the importance of controlling fly populations has never been more critical. By following a "30/30" approach, producers can get ahead of the fly population in the spring before it builds to a level that exceeds the economic threshold. By continuing to feed 30 days past the average first frost date in the fall, producers can reduce the total number of overwintering pupae, thus giving them a head start on the population for the following year. When incorporated into a complete Integrated Pest Management (IPM) program, the use of ClariFly® Larvicide or Altosid® IGR with a "30/30" approach can help producers account for the unpredictability of the seasons and significantly lower fly populations while increasing cattle comfort and profitability.

TO LEARN MORE,
CALL YOUR DISTRIBUTOR OR VISIT
ALTOSIDIGR.COM OR CENTRALFLYCONTROL.COM

30/30 PROGRAM

The 30/30 Program encourages operations using ClariFly® Larvicide or Altosid® IGR to start including the products in their feed or supplement early in the spring, 30 days before flies begin to appear through 30 days after the first frost when cold weather reduces or ends fly activity. This ensures an ideal window of treatment with the products, protecting against an unpredictably early or late start to the spring or winter seasons.

To help limit the population of overwintering flies that emerge in spring and mark the start of fly season, follow these key steps of the **30/30 Program**:

- Begin feeding ClariFly® Larvicide and Altosid® IGR 30 days before average daytime temperatures reach 65° F
- Feed ClariFly® Larvicide at the labeled rate of 0.10* mg per kg per day
- Feed Altosid® IGR at the labeled rate of 1.13* mg per kg per day
- Continue the process until 30 days after the first frost in the fall

*Consult product label for exact instructions